

Note of release, Aug 6, 2007
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In this release of the GTAP CO₂ emissions data that goes with the version 6.0 GTAP data base, we do not account for emissions from the following fossil fuel use:

- (1) commodity "egdt" used by the "crp" sector in New Zealand ("nzl"); and
- (2) commodity "p_c" used by the "p_c" sector, for all regions.

Reasons for the treatment above, respectively, are:

- (1) Since the GTAP CO₂ emissions data are calculated based on the GTAP Energy Volume data (gsdvole.har), I had a discussion with Rob McDougall, who is in charge of the energy module in the GTAP data base construction.

Rob explained:

"gdt" includes gas manufacture and gas distribution. Manufactured gas is small compared to natural gas, so mostly "gdt" is distribution of natural gas. Whether a purchase of natural gas should count as "gas" or "gdt" depends on whether it was distributed through gas mains, and we can't tell that from the Extended Energy Balances.

In classifying the New Zealand chemicals industry's purchases as "gdt", we're saying that it gets its gas through the mains. That's unusual but not necessarily wrong.

In general, "egas" and "egdt" should have the same "CST" value.

So, to be consistent with the treatment for the GTAP Energy Volume data, the CST ratio for "egdt" used by the "crp" sector of New Zealand ("nzl") would be best set to 1.0, the same as that for "egas" used by the "crp" sector of New Zealand.

Note that in this release such treatment is done for New Zealand only, thanks to Glen Peters, who detected this problem for New Zealand. Considering the current treatment in the GTAP Data Base for the "egas" and "egdt" split, the New Zealand treatment does not apply to other countries. That is, for other countries, commodity "egdt" used by the "crp" sector is assumed being used for combustion purposes.

- (2) given the treatment of inter-product transfer of refined petroleum products in the GTAP data base construction module—i.e., the Energy Module. See section 17.2 in Chapter 17 of the GTAP Version 6 Data Base documentation (https://www.gtap.agecon.purdue.edu/resources/res_display.asp?RecordID=1951)
We believe CO₂ emissions numbers in this release are closer to truth, given that the calculation is based on the GTAP energy volume data (gsdvole.har). Users are free to decide which release of GTAP CO₂ emissions data they prefer to use.

Comments/suggestion please send to Huey-Lin LEE (email: hueylin_lee@yahoo.com)